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EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/972,207

Applicant(s)

BRADSHAW ET AL.

Examiner

Azizul Choudhury

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 16 and 18-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 16 and 18-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/25/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

This office action is in response to the correspondence received on February 25, 2005.

Claim Objections

Claim 33 is objected to because of the following informalities: Claim 33 is dependent upon itself. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 16, 18-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Lagueux, Jr. et al (US Pat No: 6,538,669), hereafter referred to as Lagueux.

1. With regards to claim 1, Lagueux teaches a storage area network (SAN), comprising: a plurality of storage devices; a plurality of digital data processors, each having a file system that effects access to one or more of the storage devices coupled to the SAN; and a process in communication with the digital data processors, wherein the process responds to a notification from one of the digital data processors requesting for extension of the file system at the

requesting digital data processor in accordance with a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring the extension of the file system, and wherein the process adds storage to the file system of the requesting digital processor to implement the request for the extension of the file system according to the attribute in the at least one group of attributes associated with the requesting digital data processor (Lagueux teaches a storage area network design (column 5, lines 20-21, Lagueux). All storage systems require a file system and hence it is inherent that Lagueux's design possesses one as well. In fact, Lagueux provides examples how different types of storage mediums are acceptable (tape or hard drive for instance) (column 7, lines 50-52, Lagueux). Each medium employs its own set of possible file systems (hard drives are able to employ FAT32 or NTFS for instance) so; different file systems are possible within the design as well. In addition, it is inherent that devices that are able to function as individual nodes in a network and have means by which to process data must also possess processors. The storage units of Lagueux's design are individual nodes within the SAN (Figure 17, Lagueux). In addition, since the storage units are standalone units, they must have the means by which to process the commands to read or write data and also by which to process other commands such as delete and adjust settings. Hence, the storage units must each inherently possess processors. Furthermore, Lagueux goes on to state that the design allows for processors (column 6, line 14, Lagueux). Finally,

the storage elements are hierarchically distributed (column 24, line 12, Lagueux).

The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

2. With regards to claim 2, Lagueux teaches the SAN, wherein the groups of attributes include a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level and wherein the requesting digital data processor is associated with the first and second groups, and wherein the first group is further associated with at least one digital data processor other than the selected requesting digital data processor (Lagueux's design allows for its storage elements to be hierarchically distributed (column 24, line 12, Lagueux)).
3. With regards to claim 3, Lagueux's design teaches the SAN, wherein the first group is associated with a first set of file extension attributes defining a default policy for digital data processors associated with that group and wherein the second group is associated with a second set of one or more file extension configuration attributes, wherein a definition of an attribute in the second set overrides a definition for that attribute in the first set wherein the configuration attributes of the second set, taken in conjunction with non-overridden configuration attributes of the first set, define a policy for the second group, wherein the process configures the file extension on behalf of the requesting

digital data processor using the attribute in the policy defined for the second group (Lagueux's design has means for rules (column 7, lines 20-30, Lagueux). Rules are equivalent to the claimed policies).

4. With regards to claim 4, Lagueux teaches the SAN, wherein the attributes are a member of a set of configuration attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, and a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification (Lagueux's design allows for monitoring of the storage units via the storage server (column 6, lines 57-58, Lagueux). In addition, Lagueux continues and states how a variety of placements for the storage units are permissible within the design (column 8, line 51 – column 9, line 20, Lagueux). Some examples provided show means for arranging the storage to support backup means, raid means and other storage routing means. Hence, Lagueux's design allows for attributes to be monitored and allows for another storage unit's resources to be called when a storage unit reaches its threshold as claimed. Finally, the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage

elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

5. With regards to claim 6, Lagueux teaches the SAN, wherein a database coupled to the process stores the hierarchical arrangement of the groups of attributes (Lagueux's design has rules (column 7, lines 20-30, Lagueux). Since rules are present, attributes must be present as claimed. In addition, attributes must be stored in order for them to be useful).
6. With regards to claim 16, Lagueux teaches a method in a storage area network (SAN) comprising one or more digital data processors and one or more storage devices, each having a file system that effects access to one or more of the storage devices, comprising: defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system; assigning the digital data processors to the groups of attributes; extending the file system of a digital data processor requesting an extension of the file system by adding storage to the file system of the requesting digital data processor according to the attributes in the at least one group of attributes associated with the requesting digital data processor (Lagueux teaches a storage area network design (column 5, lines 20-21, Lagueux). All storage systems require a file system and hence it is inherent that Lagueux's design possesses

one as well. In fact, Lagueux provides examples how different types of storage mediums are acceptable (tape or hard drive for instance) (column 7, lines 50-52, Lagueux). Each medium employs its own set of possible file systems (hard drives are able to employ FAT32 or NTFS for instance) so; different file systems are possible within the design as well. In addition, it is inherent that devices that are able to function as individual nodes in a network and have means by which to process data must also possess processors. The storage units of Lagueux's design are individual nodes within the SAN (Figure 17, Lagueux). In addition, since the storage units are standalone units, they must have the means by which to process the commands to read or write data and also by which to process other commands such as delete and adjust settings. Hence, the storage units must each inherently possess processors. Furthermore, Lagueux goes on to state that the design allows for processors (column 6, line 14, Lagueux). Plus, the storage elements are hierarchically distributed (column 24, line 12, Lagueux). This is equivalent to the claimed file extension policy. Also, Lagueux's design allows for its storage elements to be hierarchically distributed (column 24, line 12, Lagueux). Additionally, Lagueux's design allows for monitoring of the storage units via the storage server (column 6, lines 57-58, Lagueux). In addition, the storage units are able to serve as raid memory for one another, backup memory for each other or other routing means. Since memory is monitored to such an extent, it is inherent that the claimed alerting means are present. In fact, Lagueux continues by stating how there are informed consent managers and

modules (column 7, lines 20-30, Lagueux). Informed consent is equivalent to the claimed alert feature in a SAN design. Finally, the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

7. With regards to claim 18, Lagueux teaches the method, wherein the attributes are a member of a set of attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification (Lagueux's design allows for monitoring of the storage units via the storage server (column 6, lines 57-58, Lagueux). In addition, Lagueux continues and states how a variety of placements for the storage units are permissible within the design (column 8, line 51 – column 9, line 20, Lagueux). Some examples provided show means for arranging the storage to support backup means, raid means and other storage routing means. Hence, Lagueux's design allows for attributes to be monitored and allows for another storage unit's resources to be called when a storage unit reaches its threshold as claimed. Finally, the storage elements are hierarchically distributed (column 24,

line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

8. With regards to claim 19, Lagueux teaches the method, wherein assigning the digital data processors to the groups further comprises assigning one of the digital data processors to the first group and to a third group hierarchically related to the second group at a lower level, the third group inheriting at least a portion of the policy defined for the second group and overriding the reminder of the policy (Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows

for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

9. With regards to claim 20, Lagueux teaches the method, wherein assigning the digital data processors to the groups further comprises assigning another one of the digital data processors to the first group and to a third group hierarchically at the same level as the second group, the third group inheriting at least a portion of the policy defined for the first group and overriding the remainder of the policy to define a file extension policy that is at least partially different from the policy defined for the second group (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically

distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

10. With regards to claim 21, Lagueux teaches the method, wherein the groups of attributes include a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data processor is in the first and second groups, and wherein the first group includes at least one digital data processor other than the requesting digital data processor (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column

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24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

11. With regards to claim 22, Lagueux teaches the method wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

12. With regards to claim 23, Lagueux teaches the method wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in the at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels (Lagueux's design has means for rules (column 7, lines 20-30, Lagueux). Rules are equivalent to the claimed policies. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).
13. With regards to claim 24, Lagueux teaches the method wherein at least one group comprises a host group policy defining attributes for configuring, an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy (Lagueux's design has means for rules (column 7, lines 20-30, Lagueux). Rules are equivalent to the claimed policies. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

14. With regards to claim 25, Lagueux teaches the method wherein the first group is associated with a first set of file extension attributes defining a default policy for digital data processors associated with that group and wherein the second group is associated with a second set of one or more file extension configuration attributes, wherein a definition of an attribute in the second set overrides a definition for that attribute in the first set, wherein the configuration attributes of the second set, taken in conjunction with non-overridden configuration attributes of the first set, define a policy for the second group, wherein the process configures the file extension on behalf of the requesting digital data processor using the attributes defined for the policy of the second group (Lagueux's design has means for rules (column 7, lines 20-30, Lagueux). Rules are equivalent to the claimed policies. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

15. With regards to claim 26, Lagueux teaches the SAN, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's

own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

16. With regards to claim 27, Lagueux teaches the SAN, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's own address though. In addition, each drive much process commands and is expected to perform the basic read/write

functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

17. With regards to claim 28, Lagueux teaches the SAN, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have its own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations,

each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

18. With regards to claim 29, Lagueux teaches a computer readable medium including a manager program in communication with one or more digital data processors and one or more storage devices, each having a file system that effects access to one or more of the storage devices, wherein the manager program is capable of causing operations, the operations comprising: defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system; assigning the digital data processors to the groups of attributes; and extending the file system of a digital data processor requesting an extension of the file system by adding storage to the file system of the requesting digital data processor according to the attributes in the group of attributes associated with the requesting digital data

processor (Lagueux teaches a storage area network design (column 5, lines 20-21, Lagueux). All storage systems require a file system and hence it is inherent that Lagueux's design possesses one as well. In fact, Lagueux provides examples how different types of storage mediums are acceptable (tape or hard drive for instance) (column 7, lines 50-52, Lagueux). Each medium employs its own set of possible file systems (hard drives are able to employ FAT32 or NTFS for instance) so; different file systems are possible within the design as well. In addition, it is inherent that devices that are able to function as individual nodes in a network and have means by which to process data must also possess processors. The storage units of Lagueux's design are individual nodes within the SAN (Figure 17, Lagueux). In addition, since the storage units are standalone units, they must have the means by which to process the commands to read or write data and also by which to process other commands such as delete and adjust settings. Hence, the storage units must each inherently possess processors. Furthermore, Lagueux goes on to state that the design allows for processors (column 6, line 14, Lagueux). Finally, the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

19. With regards to claim 30, Lagueux teaches the computer readable medium, wherein the attributes are a member of a set of attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices

accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification (In Lagueux's design, the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

20. With regards to claim 31, Lagueux teaches the computer readable medium, wherein the groups of attributes include: a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data process is in the first and second groups, and wherein the first group includes at least one digital data processor other than the requesting digital data processor (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have its own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a

hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

21. With regards to claim 32, Lagueux teaches the computer readable medium, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20,

Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

22. With regards to claim 33, Lagueux teaches the computer readable medium, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in the at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels (As previously stated, Lagueux discloses how each storage unit is able to have a combination of drives (tape drive and hard drive in one unit for instance) (column 7, lines 50-52, Lagueux). Each of these drives is able to have it's own address though. In addition, each drive much process commands and is expected to perform the basic read/write functions. To perform such operations, each drive must have a processor. Hence, it is possible for each of the drives of the storage units of Lagueux's design to have its own processor. Furthermore, the storage units are in a hierarchical structure as stated previously. They each have processors and they are able to pass off storage tasks to each other (able to function as raid, backup, etc) (column 8, line 51 – column 9, line 20, Lagueux). So, each of the storage units in each of the hierarchical structures have processors and are able to

pass jobs off to one another. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

23. With regards to claim 34, Lagueux teaches the computer readable medium, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy (Lagueux's design has means for rules (column 7, lines 20-30, Lagueux). Rules are equivalent to the claimed policies. Also Lagueux states that the storage elements are hierarchically distributed (column 24, line 12, Lagueux). The design allows for those storage elements to be expandable as well (column 21, line 60 – column 22, line 20, Lagueux) and is illustrated in Figure 22).

Response to Remarks

The amendment filed February 25, 2005 has been reviewed but is not deemed fully persuasive. It is appreciated that efforts have been made to clarify the claim language. However many of the details claimed continue to lack sufficient substance to illustrate novelty for a storage area network design.

The primary concern addressed within the remarks focuses on the trait of extending a file system. The revised rejections provide brief explanations as to how such means are possible within the Lagueux prior art (column 21, line 60 – column 22, line 20, Lagueux) (Figure 22, Lagueux). As always however, to attain a full appreciation of the prior art design, it is not only necessary for the applicants and their representatives to read the disclosure for a literal interpretation but to also understand the spirit of the design.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC


VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER